

No. 616,117.

Patented Dec. 20, 1898.

W. KRUG.
WHIFFLETREE.

(Application filed June 20, 1898.)

(No Model.)

Fig. 2.

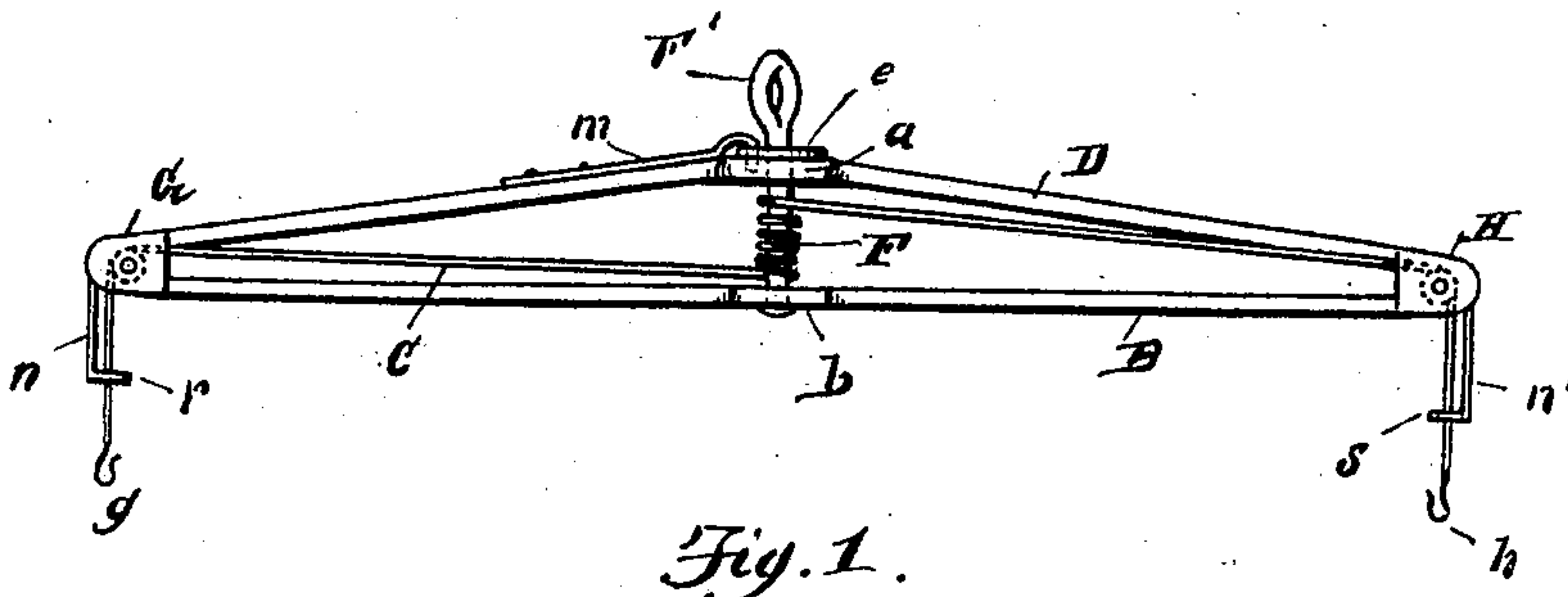
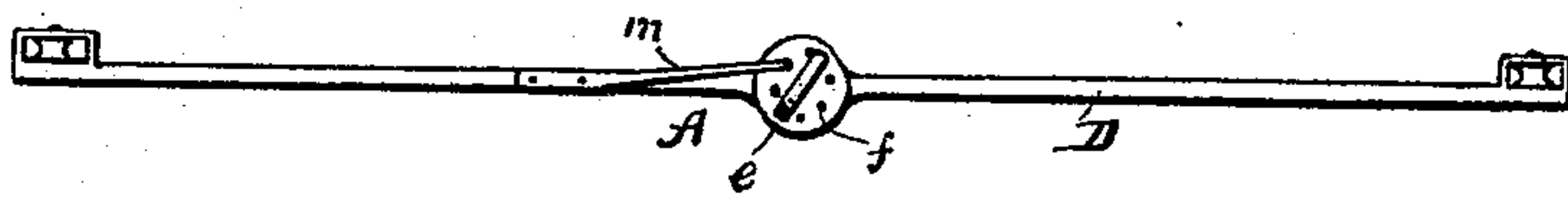


Fig. 1.

WITNESSES.

C. P. Luker
W. M. Dougall

INVENTOR.

WILLIAM KRUG

J. D. Bradford
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM KRUG, OF McFARLAND, WISCONSIN.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 616,117, dated December 20, 1898.

Application filed June 20, 1898. Serial No. 683,901. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM KRUG, a citizen of the United States, residing at McFarland, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Whiffletrees; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to whiffletrees, and has for its object to provide certain new and useful improvements in the construction whereby the hooks to which the harness-traces are fastened may be extended.

A further object is to provide a neat simple construction that can be quickly operated and that will retain its adjusted position without danger of becoming accidentally disengaged or detached.

Referring to the accompanying drawings for a better understanding of my invention, Figure 1 is a plan view, and Fig. 2 is an elevation.

Like letters of reference refer to corresponding parts.

A represents the frame of the whiffletree, which may be constructed of any suitable material, though I prefer to use metal in the form shown, comprising the straight member B and the truss D. These two members are arranged in the same plane, with their ends united and secured to the shive-blocks G and H, and at the center they are secured to the journal-blocks *a b*, in which the windlass F is supported and adapted to turn. The end F' of the windlass extends backward in the form of a ring, by means of which the whiffletree is secured to the evener or cross-piece of the thills, and the opposite end of the bolt which forms the windlass extends through the journal-blocks *b* and terminates with an enlarged head to prevent it from being drawn through when the strain is brought to bear upon it.

C represents a cable, preferably wire, so as to give it strength and flexibility. This cable is secured at its center to the windlass and its ends carried outward and around the shives G and H, where they terminate with

the hooks *g h*. Thus it will be observed that as the windlass is turned in one direction the cable will be wound thereon, drawing the hooks *g h* near the ends of the whiffletree, and when operated in the other direction the cable will be unwound and the hooks permitted to be drawn away from the whiffletree, thus enabling the operator to lengthen or shorten the harness-traces by a single operation.

As a means of holding the windlass from unwinding when the strain is brought upon the cable, I provide an outer plate *e* upon the shaft of the windlass, so that it will bear against the journal-block *a*. In the outer plate *e* and the journal-block *a* I provide a series of holes *f*, adapted to register with each other, and secured to the truss-rod D at *k* is a spring-catch *m*, having its free end bent inward and arranged to engage through the openings above referred to. It will be evident from this construction that when the windlass has been adjusted to its proper position and the spring-catch permitted to engage within one of the openings the parts will be firmly held in their respective positions and will be secure against accidental disadjustment.

If desired, the guides *n n'* may be attached or formed integral with the outer ends of the whiffletree. They are preferably formed of a single piece of metal, having one end secured to or formed integral with the end of the whiffletree and arranged to extend forward a short distance, where they terminate with the eyes *r s*, through which the cable is adapted to pass and by means of which it is held from becoming disengaged from the shives.

It will be evident from the foregoing that some slight modifications may be made in the general construction and arrangement of the various parts without materially affecting the results, and I desire to have it understood that although I prefer the form herein shown other equivalent modifications may be made without materially departing from the spirit and scope of this invention.

Having thus described my invention, what I claim is—

1. In a whiffletree, the combination of a frame, a windlass secured at the center thereof, shives secured at the ends of said frame,

and a cable having its center engaging said windlass, and its ends carried around said shives and terminated with hooks, substantially as described.

- 5 2. In a whiffletree, the combination of a frame, shives secured at the ends of said frame, a windlass journaled at the center thereof, a cable secured to said windlass, and having its ends carried around said shive,
10 hooks at the ends of said cable, and means for preventing said windlass from accidental disadjustment, substantially as described.

3. In a whiffletree, the combination of a

frame having guides secured at the ends thereof, a windlass journaled at the center of said frame, a cable secured to said windlass, and having its ends carried through said guides, and means for securing said windlass in its adjusted position, substantially as described.

In testimony whereof I affix my signature 20
in presence of two witnesses.

WILLIAM KRUG.

Witnesses:

M. D. LARSON,
WM. SHELTER.